

VI. *On the Lamellicorn Coleoptera of Japan.* By
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THE present paper is intended to give a complete account of the Lamellicorn *Coleoptera*, known at the present time to be inhabitants of Japan.

A considerable collection was brought to this country by Mr. George Lewis, containing, as will be seen from the list, very numerous species new to science, all collected in South Japan. I have added to this list a few new species from the northern island, and such others as have already been noticed as inhabitants of Japan.

SCARABÆIDÆ.

- Tennoplectron parvulum*, C. W.
Caccobius jessoënsis, Harold.
" *brevis*, C. W.
✓ *Catharsius oculus*, Motsch.
✓ *Copris tripartita*, C. W.
" *acutidens*, Motsch.
Onthophagus Lenzii, Harold.
" *fodicus*, C. W.
" *ater*, C. W.
" *japonicus*, Harold.
" *atripennis*, C. W.
" *viduus*, Harold.
" *nitidus*, C. W.
" *ocellatopunctatus*, C. W.
Oniticellus phanæoides, Westw.

APHODIIDÆ.

- Aphodius apicalis*, Harold.
" *major*, C. W.
" *globulus*, Harold.
" *elegans*, Allibert.
" *lividipennis*, C. W.
" *diversus*, C. W.
" *rectus*, Motsch.
" *breviusculus*, Motsch.
" *castaneipennis*, C. W.
" *nigerrimus*, C. W.
" *4-punctatus*, Udd.
" *uniplagiatus*, C. W.
" *uniformis*, C. W.

- Aphodius impunctatus*, C. W.
" *pallidicinctus*, C. W.
" *vitta*, Motsch.
" *obsoletoguttatus*, C. W.
" *pallidiligonis*, C. W.
" *punctatus*, C. W.
" *obsoletus*, C. W.
" *ovalis*, C. W.
" *rufangulus*, C. W.
" *urostigma*, Harold.
" *variabilis*, C. W.
" *nigrotessellatus*, Motsch.
" *atratus*, C. W.
" *rugosostriatus*, C. W.
" *Lewisii*, C. W.

- Ammœcius nitidulus*, C. W.
Saprosites japonicus, C. W.
Rhyssemus asperulus, C. W.
Psammodius convexus, C. W.
Ægialia nitida, C. W.

GEOTRUPIDÆ.

- Ochodæus maculatus*, C. W.
Bolboceras nigroplagiatum, C. W.
Geotrupes levistriatus, Motsch.
" *auratus*, Motsch.
" *purpurascens*, C. W.

TROGIDÆ.

- Trox setifer*, C. W.
" *obscurus*, C. W.
" *opacotuberculatus*, Motsch.

MELOLONTHIDÆ.

- Ectinohoplia variolosa, C. W.
 Hoplia communis, C. W.
 " mœrens, C. W.
 Serica boops, C. W.
 " brunnea, Linn.
 " grisea, Motsch.
 " polita, Gebler.
 " japonica, Motsch.
 " orientalis, Motsch.
 Apogonia splendida, Bohem.
 " major, C. W.
 Holotrichia parallela, Motsch.
 " picea, C. W.
 " morosa, C. W.
 " castanea, C. W.
 " transversa, Motsch.
 Pollaplonyx (g. n.) flavidus, C. W.
 Heptophylla picea, Motsch.
 Granida albolineata, Motsch.
 Hoplosternus japonicus, Harold.
 Melolontha japonica, Burm.

RUTELIDÆ.

- Phyllopertha horticola, Linn.
 " diversa, C. W.
 " irregularis, C. W.
 " orientalis, C. W.
 " arenaria, Brullé.
 " octocostata, Burm.
 Anomala { rufocnrea, Motsch.
 " } var. lucidulus, Motsch.
 " geniculata, Motsch.
 " costata, Hope.

- Anomala testaceipes, Motsch.
 " flavilabris, C. W.
 " difficilis, C. W.
 " pubicollis, C. W.
 Euchlora cuprea, Hope.
 " albopilosa, Hope.
 " multistriata, Motsch.
 Mimela Gashkevitchii, Motsch.
 " lucidula, Hope.
 " [testaceoviridis, Blanch.]
 Popilia japonica, Newm.
 Adoretus tenuimaculatus, C. W.

DYNASTIDÆ.

- Xylotrupes dichotomus, Linn.
 Phileurus chinensis, Falderm.

CETONIDÆ.

- Rhomborrhina japonica, Hope.
 " unicolor, Motsch.
 " polita, C. W.
 Glycyphana pilifera, Motsch.
 " { argyrosticta, Burm.
 " } albosetosa, Motsch.
 " Sieboldi, Sn. v. Voll.
 " fulvistemma, Motsch.
 Cetonia submarmorea, Burm.
 " speculifera, Swartz.
 Anthracophora rusticola, Burm.
 Gnorinus subopaens, Motsch.
 Trichius fasciatus, Linn.
 " 17-guttatus, Sn. v. Voll.
 Valgus angusticollis, C. W.

SCARABÆIDÆ.

Temnoplectron parvulum, C. Waterh.

Ent. Mo. Mag. 1874, x. p. 175.

Elongatum, subovatum, piceum, nitidum. Capite magno, leviter convexo, subrotundato, subtilissime et crebre punctulato; margine antico depresso, in medio bidenticulato atque inter denticulos emarginato. Thorace crebre distincte punctato, longitudine duplo latiori, sat convexo, antice angustato, margine antico leviter emarginato, postico rotundato, lateribus ad angulos anticos subito oblique angustatis; angulis anticis rectis, posticis obtusis. Elytris sat convexis, lævibus, longitudine non brevioribus; infra humeros latioribus, dein ad apicem arcuatim angustatis; singulis tenuissime septem-striatis.

Tibiis compressis, arcuatis; tarsis compressis. Antennarum clava nigro-fusca.

Long. $2\frac{1}{2}$ mill.; lat. $1\frac{1}{2}$ mill.

Hab.—Fukuhora; Nagasaki, in cow-dung, March and April.

Caccobius jessoënsis, Harold.

Coleopterolog. Hefte, ii. 1867, p. 100.

“Ovalis, deplanatus, leviter nitidus, nigro-æneus, thorace subvirescente. Caput obsolete bicarinatum, clypeo integro. Thorax parum dense punctatus, punctis versus basin majoribus, angulis anticis acutiusculis. Elytra regione scutellari impressa, sat fortiter crenato-striata, interstitiis leviter convexis, punctulatis. Pygidium æqualiter sat dense punctatum. Palpi cum antennis piceis. Prosternum ut in *C. Schreberi* carina longitudinali accessoria.”

Long. $3\frac{1}{3}$ lin.

Hab.—Hakodadi. Coll. Brit. Mus.

Caccobius brevis, sp. nov.

Niger, nitidus, punctatus, brevis; elytris obscure piceis. Capite transversim bicarinato, ante oculos vix dilatato, crebre punctato. Thorace leviter convexo brevissime pubescenti, antice quadrangulariter emarginato, angulis anticis vix obtusis, lateribus leviter rotundatis, postice leviter bisinuato, crebre fortiter punctato, postice ocellato-punctato. Elytris ad latera et ad apicem leviter rotundatis; leviter striatis, striis distanter obsolete punctulatis, interstitiis planis sat parce minute tuberculatis, et brevissime hirsutis. Antennis ferrugineis; clavâ nigrâ.

Long. 2— $2\frac{1}{2}$ lin.; lat. $1\frac{1}{4}$ — $1\frac{3}{4}$ lin.

Hab.—Hiogo; Osaka. In sandy places.

↳ *Catharsius ochus*, Motsch.

Etud. Ent. 1860, p. 13.

“*Cath. jacchi* valde affinis, sed thoracis medio minus elevato, utrinque profundo-excavato; elongato-ovatus, convexus, niger; clypeo semilunato, creberrime punctato, fronte in cornu subcurvato producto; thorace punctatissimo, medio gibboso, subbilobo, elevato, utrinque rotundato-excavato; elytris thoracis latitudine, vix ovatis tenuissime

striatis, interstitiis leviter convexis, subtilissime scarificato-rugulosis, subsericeo-nitidis."

Long. 9 lin. ; lat. $4\frac{1}{2}$ lin.

♀. Forehead with a short transverse carina; thorax with a ridge towards the front of the disk.

Hab.—Simabara and Hiogo, and other sandy districts in Kiushiu and Nipon. Very abundant.

Copris tripartita, sp. nov.

C. lunari affinis at minor, clytrorum interstitiis impunctatis. Niger, nitidus. Elytris punctato-striatis, interstitiis convexiusculis, impunctatis.

♂, max. Capite cornu longo erecto, fortiter punctato. Thorace utrinque cornu erecto longo apice acuto; dorso elevato, elevatione in medio a sulco fortiter punctato divisâ, antice quadrinodosâ; angulis anticis rectis extus emarginatis.

Long. $8\frac{1}{2}$ lin. ; lat. $4\frac{3}{4}$ lin.

♀. Capite cornu brevi obtuso. Thorace fortiter crebre punctato, dorso fere lævi a sulco fortiter punctato longitudinaliter diviso, antice carinâ transversâ brevi; angulis anticis rotundato-obtusis.

Long. 8 lin. ; lat. $4\frac{1}{2}$ lin.

♂, minor. Capite cornu brevi, acuto. Thoracis cornubus lateralibus nullis.

Long. 7 lin.

Closely allied to *C. lunaris*. The head is similar, but is only slightly emarginate in front. The thorax is of the same form but has the sides emarginate on the outside at the anterior angles, thus making them rectangular; the armature is the same, but the central raised part is more elevated and distinctly quadrituberculate on the front margin; the surface is strongly punctured everywhere except the upper part of the raised portion. The elytra are more distinctly punctate-striate, the interstices slightly more convex and without any punctuation.

In the female the thorax is thickly and strongly punctured, except a smooth spot on each side of the disk.

This species must not be confounded with an Indian one (for which I have no published name that I can depend upon), "*C. pompilius*, MSS.," which differs from *C. tripartita* in having in the larger development two small tubercles in front at the base of the raised portion; and the interstices of the elytra are distinctly although

finely and moderately thickly punctured, whereas in *C. tripartita* they are without punctuation.

Hab.—Japan, Tsu-Sima.

✓ *Copris acutidens*, Motsch.

Etud. Ent. 1860, p. 13.

“Figura *C. reflexi*, F., sed paulo major; oblonga, convexa, nitida, nigra, ♂ fronte in cornu longissimo, curvato-producto; thorace transverso, lateraliter explanato, medio cornis quatuor elevatis armato, lateralibus tenuis, acutissimis, mediis conjuncto-productis, apice obtusis, elytris elongato-subovatis, profunde punctato-striatis; ♀ clypeo antice valde inciso, fronte cornu brevi, erecto armato, thorace antice abrupte truncato, in carinam obtuso-elevato, prominulo, carina transversa.”

Long. 5 lin.; lat. $2\frac{2}{3}$ lin.

Hab.—Hiogo, Osaka; usually abundant in sandy places where it occurs.

✓ *Onthophagus Lenzii*, Harold.

O. Lenzii, Harold, Abhandl. Nat. Ver. Bremen, iv. 1874, p. 283.

Niger, subnitidus, antennis ferrugineis, vertice carinis duabus arcuatis approximatis, postica altiore, thorace utrinque ad latera excavato, dorso supra foveolam carinato, elytris leviter crenato-striatis, interstitiis parce, lateribus fortius punctatis.

Long. $5\frac{1}{2}$ lin.; lat. $3\frac{1}{2}$ lin.

Mas.—Carinâ anticâ verticis obsoletiore; tibiis anticis basi e latere compressis et inflexis.

Fem.—Tibiis anticis simplicibus, extus 4-dentatis.

Hab.—Nipon, Yesso. Abundant.

Allied to *O. angulatus*, Redt.

✓ *Onthophagus fodiens*, sp. nov.

Niger, subnitidus, sat convexus, dense punctatus.

♂. Capite plano, latitudine $\frac{1}{4}$ longiori, antice rotundato, margine leviter reflexo, sat fortiter crebre punctato, transversim ruguloso. Thorace capite vix duplo latiori, lateribus rotundatis, antice emarginato, postice leviter bi-emarginato; angulis anticis prominentibus, obtusis; dorso fortiter gib-

boso, antice utrinque declivo, supra angulos posticos carinato, fortiter crebre punctato, angulos anticus versus vix punctulato, angulis posticis fortiter et parce punctatis. Elytris dorsim subdepressis, brevibus, subopacis, leviter striatis, striis nitidis parce punctulatis; interstitiis subplanis sat parce tenuiter punctulatis, latera versus sat dense punctatis.

Long. 5 lin. ; lat. 3 lin.

♀. Capite antice vix reflexo, fronte transversim bicarinatâ. Thorace leviter convexo, angulis anticis minus prominentibus.

Long. 3 $\frac{3}{4}$ lin. ; lat. 2 $\frac{3}{4}$ lin.

Hab.—Onaura. Rare.

Onthophagus ater, sp. nov.

Ater, sat convexus, dense punctatus.

♂. Capite plano, antice fere truncato, margine reflexo, sat fortiter crebre punctato. Thorace capite vix duplo latiori, lateribus rotundatis; dorso gibboso, antice utrinque declivo, crebre fortiter punctato. Elytris vix nitidis, leviter striatis, interstitiis vix convexiusculis, crebre sat fortiter punctatis.

Long. 4 lin. ; lat. 2 $\frac{1}{4}$ lin.

♀. Fronte obsolete bicarinatâ.

This species is very close to the preceding. It differs, however, in having the thorax rather more thickly punctured. The interstices of the elytra are less flat, and are thickly and somewhat strongly punctured, whereas in the preceding species the interstices are only moderately thickly punctured and the punctures are very lightly impressed. In *O. fodiens* the carinæ on the forehead of the ♀ are so placed that the anterior one is midway between the posterior one and the apex, whereas in *O. ater* the anterior carina is much nearer to the apex than to the posterior carina.

Hab.—Nipon and Kinshiu. Abundant everywhere.

Onthophagus japonicus, Harold.

O. japonicus, Harold, Abhandl. Nat. Ver. Bremen, iv. 1874, p. 290.

Niger, subæneus, nitidus. Elytris obscure flavis, maculis nonnullis humeralibus, fasciâ laceratâ pone medium, suturâ maculâque apicali nigris.

Long. 5 lin. ; lat. 3 lin.

♂. Capite antice rotundato, fronte carinâ semicirculari. Thorace gibboso, disco utrinque in dentem triangularem ampliato et ad latera sub dente foveâ magnâ nitidâ.

♀. Fronte bicarinatâ; thorace leviter convexo.

Varieties occur in which the black markings are reduced to a few spots.

Hab.—Hiogo and Osaka. “At the foot of Maiyasan it has occurred in great plenty.”

Onthophagus atripennis, sp. nov.

Nigro-æneus; capite thoraceque nigro-cuprascentibus; elytris leviter striatis, striis tenuiter et parce punctulatis ad suturam vix punctulatis, latera versus distincte punctulatis, interstitiis planis. Antennis ferrugineis.

♂. Capite antice angulatim producto apice reflexo; inter antennis carinâ rectâ utrinque abbreviatâ, inter oculos laminâ transversâ apice semicirculariter emarginatâ. Thorace gibboso, disco excavato, excavationis marginibus postice utrinque in tuberculum instructis.

Long. $4\frac{3}{4}$ lin.; lat. $2\frac{3}{4}$ lin.

♂, *var. minor*. Capite antice rotundato, inter oculos carinâ abbreviatâ, inter antennis carinâ transversâ. Thorace leviter convexo, antice vix bituberculato.

Long. 4 lin.

Head as long as broad, contracted in front, the apex blunt and reflexed; there is a transverse slightly-raised ridge between the antennæ, and a perpendicular lamina between the eyes; this lamina is emarginate almost to its base; the clypeus is somewhat sparingly and finely punctured, the forehead rather more thickly and distinctly punctured. The thorax is evenly, moderately thickly, but not very strongly punctured. The elytra are as wide as the thorax and the same length, narrowed towards the apex, which is rounded; the scutellar region is somewhat flattened; the striae are very delicate and very finely and sparingly crenate-striate; the interstices flat, that next the suture almost impunctate, the next sparingly and very delicately punctured, the rest becoming more distinctly punctured as they approach the sides.

Hab.—Kiushiu and Nipon; in woods and shady places under trees.

✓

Onthophagus viduus, Harold.

O. viduus, Harold, Abhandl. Nat. Ver. Bremen, iv. 1874, p. 283.

Convexus, sat nitidus, brevissime pubescens, nigro-æneus, antennis ferrugineis, elytris leviter crenato-striatis, interstitiis leviter convexis, irregulariter sat crebre punctatis.

♂. Clypeo ad apicem reflexo; fronte bicarinatâ; thorace gibboso, crebre sat fortiter punctato, disco antice fortiter impresso, impressionis lateribus postice utrinque in tuberculum instructis.

Long. 4 lin.

♂, *var. minor*. Thorace leviter convexo.

Long. 3 lin.

♀. Capite transversim bicarinato; thorace leviter convexo.

Long. 4 lin.

In the ♂ of this species the two carinæ on the forehead are situated one before and the other behind the eyes, the posterior one being often very obscure. In the ♀ the carinæ are both more distinct (abbreviated at each side), and are placed one between the eyes and the second (parallel to it) in front of it. In the male the clypeus is slightly acuminate in front, the apex slightly reflexed. The elytra present in some specimens a red spot at the shoulder and another near the apex of the third and fifth interstices.

Hab.—Kiushiu and Nipon. Generally distributed in open places, heaths, &c.

Onthophagus nitidus, sp. nov.

Nigerrimus, nitidus; thorace convexo, disco parce subtilius, lateribus distincte punctato; elytris striatis, striis remote indistincte punctatis; interstitiis sat convexis; sat parce fortiter punctatis.

Long. $3\frac{1}{4}$ lin.; lat. 2 lin.

Head flat, semicircularly rounded in front; the lateral angle of the head slightly obtuse; the anterior margin pitchy, very slightly reflexed; forehead not very thickly punctured, with a short, transverse, indistinct carina behind; the clypeus thickly and finely granulose-punctate. Thorax with a faint longitudinal impression behind, very convex and very shining, one-third broader than long,

semicircularly emarginate in front to receive the head, the anterior angles obtuse, the sides rounded, the posterior margin obliquely bitruncate. The punctuation is sparse on the disk, and very lightly impressed; towards the sides and anterior angles it is thick and strong. The elytra rather shorter than broad, the sides gently rounded to the apex; the striæ are not very deeply impressed, indistinctly and remotely punctured; the interstices gently convex, somewhat sparingly but strongly punctured, the punctures forming irregular lines bordering the striæ. Pygidium moderately convex, coarsely and rather thickly punctured. Legs pitchy-black; the anterior tibiæ quadridentate on the outer edge; the antennæ pale ferruginous. The punctures both on the upper and under surfaces of the insect bearing short ferruginous hairs, especially on the under side.

Hab.—Hiogo and Nagasaki. In carrion and in bottles set with meat.

Onthophagus ocellato-punctatus, sp. nov.

Niger, subopacus, brevis. Capite parce fortiter punctato deplanato, ante oculos leviter rotundato-explanato, margine antico triangulariter emarginato, vertice tuberculo parvo armato. Thorace longitudine $\frac{1}{3}$ latiore, sat convexo, lateribus rotundatis, antice semicirculariter emarginato (angulis anticis prominulis, acutis, divaricatis), postice rotundato vix bisinuato; supra crebre fortiter ocellato-punctato. Elytris thorace vix longioribus et non latioribus, lateribus leviter rotundatis, apicibus conjunctis rotundatis; striatis, striis fortiter crebre punctatis, interstitiis planis, parce subseriatim punctulatis, punctis brevissime setiferis.

Long. 4 mill.; lat. $2\frac{1}{2}$ mill.

Hab.—Hiogo. Sea beach.

Oniticellus phanæoides, Westw.

Onthophagus phanæoides, Westw., Royle Himal. 1839.

Ent. p. 55, t. 9, f. 3, ♂.

Onthophagus excavatus, Redt., Hügel. Kaschm. iv. 2,

1848, p. 523, ♂.

Phanæus minutus, Motsch., Etud. Ent. 1860, p. 13.

Niger, obscurus, clypeo cornu reflexo abrupte truncato, thorace phanæiformi, postice lateribus in spinam obtusam productis, femoribus luteis. Antennæ piceæ capitulo

fuscanti; clypeus hexagonus cornu reverso abrupte truncato; thorax fere quadratus, punctatissimus, punctulis arosis tuberculo antice, fossulâque postice in medio marginis impressâ, angulis posticis in spinas productis. Scutellum parvum, nitidum. Elytra striata. Corpus subtus atrum, nitidum, punctatum. Pedes femoribus luteis, tibiis tarsisque nigro-piceis.

Long. $4\frac{1}{2}$ lin.; lat. $2\frac{1}{4}$.

APHODIIDÆ.

Aphodius apicalis, Harold.

Nitidus, niger, elytris nigro-piceis, apice flavescens; capite antice subrugose punctato, postice lævigato, clypeo antice late truncato, auriculis prominulis; thorace parce lateribus punctato, angulis anterioribus obtusis, basi immarginato; scutello medio elevato, lateribus impresso; elytris leviter crenato-striatis, interstitiis planis, subtilissime punctatis, nitidis; palpis, antennis pedibusque nigro-piceis.

Long. 5— $5\frac{1}{2}$ lin.

Hab.—Nagasaki; Hakodadi; and China.

Aphodius major, sp. nov.

Aph. sorici affinis, differt scutello angustiori fere lævi; elytrorum interstitiis leviter convexis.

Niger, nitidus, convexus. Capite subtiliter punctulato punctis majoribus interspersis; fronte trituberculatâ; clypeo carinâ transversâ; genis obtusiusculis. Thorace parce fortiter punctato, antice in medio leviter impresso lævi, basi marginato, lateribus leviter rotundatis, angulis posticis sinuatis. Scutello elytrorum longitudine $\frac{1}{3}$ æquali, sat angusto ad apicem acuminato, concavo, fere lævi. Elytris thorace $\frac{1}{3}$ longioribus, fortiter crenato-striatis, interstitiis convexiusculis.

Long. 4 lin.; lat. $2\frac{1}{2}$ lin.

Var. Singulo elytro apice guttâ flavâ.

Hab.—Hiogo.

Aphodius globulus, Harold, var.

Piceo-niger, opacus, convexus, brevis; clypeo leviter emarginato, valde auriculato. Thorace convexo, dense fortiter punctato. Scutello triangulari, apice acuto, basi

punctato. Elytris obscure piceis, fortiter crenato-striatis; interstitiis sat convexis, singulis utrinque subtilius uniseriatim punctulatis, humeris sat crebre punctatis. Pedibus nigro-piceis; tarsis rufo-piceis.

Long. $2\frac{1}{2}$ lin. (elytr. $1\frac{1}{2}$); lat. $1\frac{1}{3}$ lin.

I at first considered this a distinct species from *A. globulus* (and named it *A. bisectus*), but I now prefer to regard it as a local variety. It differs from the typical form of *A. globulus* in being larger, darker in colour, and almost opaque.

Hab.—Nagasaki.

Aphodius elegans, Allibert.

Elongatus, convexus, nitidus, niger; elytris testaceis, fasciâ latâ mediâ nigrâ, ad suturam interdum interruptâ.

Long. 6—7 lin.

Hab.—China; Japan.

Aphodius lividipennis, sp. nov.

Oblongus, convexus, subopacus, ater, elytris testaceis nitidis. Capite parce obsolete punctato, antice vix emarginato, genis prominulis margine antico rufescenti, fronte obsolete unonodoso. Thorace parce fortiter punctato, antice leviter bisinuato, lateribus vix rotundatis, subparallelis margine postico immarginato. Scutello subcordato, nitido, basi vix punctulato. Elytris punctato-striatis, striâ octo antice abbreviatâ, interstitiis convexiusculis, obsolete subtilissime parce punctulatis; suturâ infuscatâ. Pedibus piceis; tarsis rufo-piceis.

Long. 3 lin. (elytr. $1\frac{2}{3}$); lat. $1\frac{1}{3}$ lin.

Resembles *A. scybalarius*, but is less convex; the thorax, however, has the posterior angles obliquely truncated, and the base is not margined. The scutellum is comparatively small and less acuminate. The striæ of the elytra are distinctly and strongly punctured; the suture is slightly fuscous. The basal joint of the posterior tarsi is rather long, being one-third longer than the spur on the tibia.

Hab.—Kagosima. Only two specimens.

Aphodius diversus, sp. nov.

Oblongus, convexus, nitidus, niger (variat, elytris pallide castaneis, singulis plagâ triangulari nigrâ notatis). Capite subtilius, marginibus profundius crebre punctatis; fronte obsolete trituberculatâ; clypeo vix emarginato, genis vix prominulis, obtusis. Thorace fere ut in *A. scybalario*, parce fortiter punctato. Scutello triangulari lævi. Elytris fere ut in *A. scybalario*, dorso depressiusculo, lateribus fere parallelis, sat fortiter punctato-striatis, interstitiis planiusculis, lævibus. Pedibus piccis.

Long. $2\frac{1}{2}$ —3 lin.; lat. $1\frac{1}{6}$ — $1\frac{1}{2}$ lin.

Allied to *A. scybalarius*, but smaller, less convex, and more parallel-sided. Thorax one-fifth broader than long, gently convex, with a few large punctures on the disk, sparingly punctured towards the sides; anterior angles obtuse; the sides scarcely rounded, except in front; posterior angles very gently emarginate; the base margined.

Hab.—China and Japan. "Very common both in dung and garden refuse."

Aphodius (Calamosternus) rectus, Motsch.

"Statura et color *Cal. granarii*, sed paulo major. Elongato-subovatus, convexus, nitidus, niger; capite rugoso-punctato; thorace transverso-quadrato, sparsim grosso-punctato, angulis posticis subacutis; elytris punctato-striatis, apice palpis, antennis tarsisque rufescentibus."

Long. $2\frac{1}{2}$ lin.; lat. $1\frac{1}{4}$ lin.

Hab.—Japan.

This species is unknown to me. I should have taken it to be the black form of *A. diversus* if it had not been for the words "*angulis posticis subacutis*," which will not apply to my insect.

Aphodius (Calamosternus) breviusculus, Motsch.

"Statura et color *Cal. carbonarii*, sed paulo brevior. Subelongatus, convexus, niger, nitidus; palpis, antennis tarsisque piccis, capite subrugoso-punctato; thorace transverso, convexo, punctulato, angulis obtusis; elytris thorace vix latioribus, striatis, interstitiis planiusculis, subtilissime punctulatis."

Long. 2 lin.; lat. 1 lin.

Hab.—Japan.

This species is unknown to me.

Aphodius castaneipennis, sp. nov.

Oblongus, convexiusculus, subnitidus, niger; elytris, pedibus, tarsisque obscure castaneis. Capite parce punctulato, clypeo sat dense fortiter punctato, antice leviter emarginato, lateribus obliquis, genis prominulis. Thoracis angulis anticis parum prominulis, lateribus leviter rotundatis, basi marginato, supra parce irregulariter fortiter punctato. Scutello triangulari, lævi. Elytris sat fortiter punctato-striatis, interstitiis sub-planis, impunctatis, subnitidis.

♀. Fronte obsolete unonodosâ.

Long. $2\frac{2}{3}$ lin.; lat. $1\frac{1}{6}$ lin.

I know of no species sufficiently near for me to compare this species with.

Hab.—Nagasaki. One specimen. Coll. G. Lewis.

Aphodius nigerrimus, sp. nov.

A. constanti affinis at brevior, thorace minus crebre punctulato, elytrorum interstitiis dorsalibus convexis, lævibus. Breviter oblongus, convexus, nitidus, niger. Caput subtilissime punctulatum, antice rugulosum, fronte trituberculatâ rugâque anticâ arcuatâ, clypeo truncato medioque leviter emarginato, genis rotundatis. Thorax convexus; ♂ dorso discrete subtiliter, lateribus crebre punctulatis; ♀ dorso sat crebre, lateribus crebrius punctatis. Scutellum basi punctulatum. Elytra convexa, parallela, crenato-striata, interstitiis dorsalibus convexis, lævibus, lateralibus subplanis, parce punctulatis.

Long. $2-2\frac{1}{3}$ lin.; lat. $1-1\frac{1}{6}$ lin.

This species very closely resembles *A. constans*, but is relatively shorter and less shining; the ocular canthus is more rounded, the punctuation of the thorax is less close, and, lastly, the elytra have the dorsal interstices distinctly convex.

Hab.—Nagasaki. "Garden refuse." Not uncommon.

Aphodius 4-punctatus, Udd.

A. sordido affinis, differt elytris interstitiis convexioribus, &c. Oblongus, convexus, luteus, nitidus; capite thoracisque disco nigro-piceis. Capite antice parce subtilissime punctulato, clypeo rufo-testaceo. Elytris testaceis, guttis duabus (unâ basali, alterâ apicali) fuscis, crenato-striatis, striis fortiter impressis; interstitiis convexis,

singulis utrinque seriatim subtilissime punctulatis. Pedibus piceis.

♂. Clypeo discrete subtiliter punctulato; tuberculo frontali intermedio fortiore. Thorace elytris paulo latioribus, latera versus punctis adspersis.

♀. Clypeo parce obsolete punctulato; tuberculis frontilibus æqualibus. Thorace elytris paulo angustioribus, sat parce punctato.

Long. 3—3½ lin.; lat. 1¼—1½ lin.

This species closely resembles *A. sordidus*, but differs in having the interstices of the elytra distinctly more convex.

Hab.—Nagasaki, &c. Common.

Aphodius uniplagiatus, sp. nov.

Elongatus, convexus, niger, nitidus, elytris piceo-rufis plagâ triangulari nigrâ (basi ejus in scutello, vertice in suturâ ad apicem) notatis. Capite subtiliter punctulato, antice leviter emarginato, lateribus obliquis, genis prominulis. Thorace antice fere truncato, lateribus rufescentibus margineque postico leviter rotundatis; basi marginato. Scutello triangulato, vix punctulato. Elytris sat fortiter crenato-striatis, inderstitiis convexiusculis, lævibus. Pedibus nigro-piceis, tarsis rufescentibus.

♂. Fronte obsolete trituberculatâ; thorace sat parce distincte punctato.

♀. Fronte obsolete unonodosâ; thorace densius punctato.

Long. 2—2¼ lin.; lat. 1 lin.

This species resembles *Aph. ferrugineus*, Muls., in general form, but is smaller; the thorax has the base distinctly but finely margined, and it is more strongly punctured. The elytra are red, with the exception of a large, black, triangular patch, the vertex of which nearly reaches to the apex of the elytra; the striæ are somewhat deep, as in *Aph. quadrimaculatus*.

Hab.—Simabara. Rare.

Aphodius uniformis, sp. nov.

Oblongus, convexus, nitidus, rufo-castaneus. Capite crebre subtiliter punctulato, antice truncato leviter emarginato, lateribus obliquis, genis prominulis obtusiusculis; fronte obsolete trituberculatâ. Thorace transverso, antice

truncato, sat crebre subtilissime punctulato punctis majoribus interspersis, basi obsolete marginato; angulis anticis obtusis, lateribus rotundatis, angulis posticis rotundatis. Scutello triangulari, vix punctulato. Elytris thoracis latitudine, parallelis, haud profunde crenato-striatis, interstitiis subplanis, lævibus.

Long. 5 mill.; lat. 2 mill.

Very close to *Aph. ferrugineus*, Muls., but rather narrower. Cheeks a little more decidedly prominent. Base of the thorax distinctly margined. Striæ of the elytra more impressed and the interstices less flat. Basal joint of the posterior tarsi one-third longer than the calcar of the tibia, equal to the two following joints taken together.

Hab.—Hakodadi. Coll. Brit. Mus.

Aphodius impunctatus, sp. nov.

Elongatus, convexiusculus, parallelus, nitidus, fere impunctatus, piceo-castaneus.

Long. 4 lin.; lat. $1\frac{1}{2}$ lin.

Head broad, rounded in front, with the anterior margin slightly reflexed; the clypeus sparingly and finely punctured, with the centre slightly raised, the cheeks rounded and very slightly prominent. Thorax scarcely longer than the width of the head, one-fourth broader than long, a little narrowed in front, convex, with a few punctures on the sides, the front margin nearly straight; the anterior angles slightly prominent, the sides slightly rounded; the posterior margin gently bisinuate, the posterior angles rounded, the base margined. Scutellum triangular, with the sides straight and the apex acute, impunctate. Elytra the same width as the thorax, with the sides very nearly parallel, conjointly rounded at the apex, each with nine well-defined (but lightly impressed) striæ, which are obsolete but moderately thickly punctured, and the eighth of which is abbreviated at the shoulders; the interstices flat and impunctate. Basal joint of the posterior tarsi as long as the spur on the tibia.

Hab.—Japan. "Taken in the sandy district of Simabara in autumn."

Aphodius pallidicinctus, sp. nov.

Elongatus, convexiusculus, nitidus, nigro-piceus; elytris piceis, marginibus thoracisque lateribus testaceis. Capite

subtiliter sat crebre punctulato, clypeo piceo distinctius punctulato, antice leviter emarginato, genis vix prominulis rotundatis. Thoracis angulis anticis obtusis, lateribus leviter rotundatis, basi inmarginato, supra subtilissime punctulato, lateribus punctis majoribus aspersis. Scutello cordato, basi punctulato. Elytris sat fortiter crenato-striatis, interstitiis convexis subtilissime sat parce punctulatis. Pedibus piceis.

Long. $2\frac{1}{3}$ lin. ; lat. 1 lin.

♂. Capite trituberculato, elytris thorace parum angustioribus subparallelis.

♀. Capite obsolete trinodoso, thorace antrorsum parum rotundato-angustato, elytris thoracis latitudinem equantibus, basi parum angustioribus.

This species appears to be most allied to *A. lividus*. It differs besides in the colour, in having the outline of the head more rounded, the cheeks more obtuse. The elytra are relatively longer, less convex, more parallel; the striae are moderately deep and somewhat strongly crenate-punctate, the interstices are gently convex.

Hab.—Nagasaki and China.

Aphodius (Chilothorax) vitta, Motsch.

“Statura *Chil. centrolineati* [*inquinatus*], sed multo major. Elongato-subovatus, convexus, nitidus, niger, elytris nigro-piceis, dorso versus scutellum rufescente, palpis tarsisque piceis, capite rugoso-punctato, trituberculato, medio transversim carinato, thorace transverso quadrato, sparsim grosso-punctato; elytris thorace vix latioribus, tenue punctato-striatis, interstitiis planiusculis.”

Long. 4 lin.; lat. $1\frac{1}{2}$ lin.

I am unacquainted with this species.

Aphodius obsoleteguttatus, sp. nov.

Oblongo-ovatus, convexus, niger, subnitidus; elytris testaceis obsolete octo-guttatis et fusco-marginatis. Capite clypeoque crebre sat fortiter punctatis, hoc antice leviter emarginato, lateribus obliquis, genis prominentibus obtusis. Thorace longitudine $\frac{1}{3}$ latiori, leviter convexo, antice paulo angustato, basi tenuiter marginato, sat crebre irregulariter punctato; lateribus dense ruguloso-punctatis, obscure piceis: angulis anticis obtusis, lateribus leviter rotundatis, angulis posticis obtusis. Scutello medio punctulato. Elytris convexis, testaceis, thoracis latitudine postice ampliatis, apice

rotundatis, crenato-striatis, interstitiis leviter convexis, parce subtilissime punctulatis; lateribus crebrius punctatis, fuscis; apice piceo. Pedibus piceis; tibiis anticis extus tridentatis; tarsorum posticorum articulo primo tribus sequentibus æquali, tibiæ calcari fere dimidio longiori.

Long. 5 mill.; lat. $2\frac{1}{2}$ mill.

Closely allied to *A. pictus*, Sturm, but at once distinguished by the somewhat close punctuation of the sides of the elytra, and on the thorax. The markings on the elytra are nearly similarly placed, the dorsal spots being obscure, well separated from each other. The striæ are broader and more impressed and the interstices are more convex, &c.

Hab.—Nagasaki.

Aphodius pallidiligonis, sp. nov.

Elongatus, nitidus, niger; elytris testaceis, maculâ triangulari ad basin, margineque laterali nigris. Capite crebre ruguloso-punctato; lateribus obliquis, piceis; genis prominentibus, obtusis. Thorace longitudine $\frac{1}{4}$ latiori, convexo, basi tenuiter marginato, dorso sat crebre evidenter punctato, lateribus dense punctulatis; angulis anticis rotundatis, lateribus parallelis, angulis posticis obtusis. Scutello lævi. Elytris basi thoracis latitudine, postice paululo ampliatis, apice rotundatis, distincte punctato-striatis, interstitiis lævissime convexis, parce subtilissime punctulatis. Pedibus piceis; tarsorum posticorum articulo primo tribus sequentibus æquali, fibiarum calcare $\frac{1}{3}$ longiori.

Long. $3\frac{3}{4}$ mill.; lat. $1\frac{3}{4}$ mill.

Allied to *A. inquinatus*, but longer and narrower, &c. The specimen described has no trace of tubercles on the clypeus. The elytra are testaceous, with a triangular spot at the base on the 2nd, 3rd and 4th interstices, and the 6th to 9th interstices nearly to the apex pitchy-black; the apex is pitchy.

Hab.—Simabara.

Aphodius punctatus, sp. nov.

Oblongus, convexus, niger, punctatus; elytris testaceo-variegatis. Capite crebre ruguloso-punctato, margine antico leviter emarginato, genis prominulis; fronte obsolete trinodosâ. Thorace antice angustiori dorso discrete punctato, lateribus dense subtiliter granuloso-punctatis;

angulis anticis rotundatis, lateribus sub-rectis, margine postico rotundato, leviter bisinuato, basi marginato. Scutello brevi, apice rotundato, basi punctato. Elytris ad basin thoracis latitudine, postice ampliatis, leviter crenato-striatis, striis sub humeris inter puncta vix perspicuis; interstitiis 1—4 convexiusculis sat crebre fortiter punctatis, 5—7 fere planis crebre confuse punctulatis, interstitio octo convexo, punctato; apice marginibusque piceo-rufis; regione dorsali nigrâ, testaceo-maculatâ. Antennarum clavâ nigrâ. Pedibus piccis.

Long. $2\frac{1}{2}$ lin.

The disk of the elytra is black; each elytron with ten yellowish spots within the black, the 1st and 2nd are on the extreme base of the 1st and 2nd interstices, the 3rd spot elongate on the 3rd interstice at a little distance from the base; the 4th on the 4th interstice and placed at the centre of the 3rd spot; the 5th is on the 3rd interstice, with its basal end a little above the lower end of the 3rd spot; the 6th spot is on the 1st interstice, a little above the 5th spot and leaving a very small black spot between this 6th and the 1st spot; the 7th spot is on the 1st interstice a little below the 6th; the 8th is a little below the 5th; the 9th (on the 3rd interstice) brackets together the 8th and 5th spots; the 10th is small and placed on the 4th interstice at the lower outer end of the 9th spot.

This species is closely allied to *A. tessulatus*, Payk., but is at once distinguished by its very strong punctuation.

Hab.—Nagasaki. Scarce.

Aphodius obsoletus, sp. nov.

A. immundo affinis, at opacus, latior, capite genis paulo prominulis.

Parum convexus, oblongo-ovalis, opacus, luteus, vertice, prothoracis disco elytrorumque suturâ infuscatis. Caput planiusculum, subtiliter crebre punctulatum, fronte muticâ, clypeo antice vix emarginato, genis vix prominulis. Thorax subtilissime sat dense punctulatis, punctis majoribus intermixtis. Elytra subtiliter crenato-striata, interstitiis planis, coriaceis, impunctis.

Long. 3 lin.; lat. $1\frac{1}{2}$ lin.

Very close to *A. immundus*, Creutz., but more opaque. Head of the same form, but with the cheeks very slightly prominent, obtuse. Thorax as in *A. immundus*. Elytra

more opaque, similarly striated, interstices coriaceous but with no visible punctuation.

Hab.—Shanghai; Japan, Nagasaki.

Aphodius ovalis, sp. nov.

This species is closely allied to *A. tristis*. It is however much shorter and more convex. The colouration is the same. The head is as in *A. tristis*, but more distinctly punctured. The thorax is a little less broad, narrowed in front, the punctuation less unequal. Scutellum triangular, scarcely punctulate at the base. Elytra relatively shorter and more convex, striated as in *A. tristis*, with the interstices shining, very nearly flat, sparingly and extremely delicately punctured. The anterior tibiæ are narrower, pitchy-black; the posterior tibiæ have the tufts of bristles on the outer edge placed in the ordinary way, and not near the base as in *A. tristis*.

Hab.—Japan. Only one specimen.

Aphodius rufangulus, sp. nov.

A. pusillo, Herbst. affinis, at minus convexus. Capite, ut in *A. pusillo*, nigro, crebre distincte punctulato, genis paulo prominulis. Thorace nigro, leviter convexo, nitido, angulis anticis obtusis, rubris, posticis obtusis. Scutello subopaco, basi punctulato. Elytris thorace vix latioribus, fortiter crenato-striatis, piceis, humeris apiceque rufescentibus. Pedibus piceis.

♂. Thorace transversim quadrato, sat crebre subtilissime punctulato punctis majoribus interspersis, angulis anticis obtusis, lateribus leviter rotundatis, basi marginato. Elytrorum interstitiis planiusculis, subopacis, parce subtilissime punctulatis.

♀. Thorace antice paulo angustato, fortius punctato. Elytrorum interstitiis convexus, nitidis, fere lævibus.

Long. 3—4 mill.; lat. $1\frac{1}{2}$ —2 mill.

This species closely resembles *A. pusillus* (especially the ♀). It is, however, less convex; the cheeks are a little more prominent; the punctuation on the thorax is rather closer, and the elytra in the ♂ are somewhat dull.

Hab.—Nagasaki, Hiogo, Awomori. Common.

Aphodius urostigma, Harold.

A. pallidicorni, Walker, affinis, at longior, elytrorum interstitiis apicem versus serie punctorum minorum notatis.

Convexus, elongatus, nitidus, niger; capite punctulato, mutico, clypeo rotundato, integro, genis vix prominulis; thorace latera versus margineque antico discrete punctato, disco lævi, basi immarginato; scutello brevi, acuminato, lævi; elytris sat fortiter striatis, striis obsolete punctulatis, interstitiis convexiusculis, lævibus, apicem versus serie punctorum minorum notatis. Clypei margine pedibusque piceis.

Long. $2\frac{1}{2}$ lin.; lat. 1 lin.

This species is peculiar, on account of the elytra being somewhat attenuated posteriorly, and for the long hairs which margin the thorax and elytra. *A. pallidicornis* of Walker is shorter than the one here described, and appears to be constantly piceous; the interstices of the elytra have each a series of somewhat large punctures from the base to the apex. *A. urostigma* has the sides of the thorax gently rounded in front, sub-parallel behind; and the interstices of the elytra have no trace of punctures, except near the apex, where there is a series of very small punctures on the inner side.

Hab.—Japan; Hong Kong; Ceylon. Common.

Aphodius variabilis, sp. nov.

A. contaminato, Herbst. affinis; differt thorace lateribus minus rotundatis, supra subtiliter discrete punctulato (♂), vel sat crebre distincte punctato (♀). Scutello piceo. Elytris postice vix ampliatis, regulariter crenato-striatis, interstitiis lævibus.

Long. 3 lin.; lat. $1\frac{1}{4}$ lin.

Head as in *A. contaminatus*; very finely, and not very thickly, punctured in the ♂; thickly, and somewhat strongly, punctured in the female. Thorax one-fifth broader than long, gently convex, shining; ♂, anterior angles obtuse, and not prominent; the sides gently rounded in front, nearly parallel behind; ♀, thorax narrower, gradually narrowed towards the front. Elytra scarcely as broad as the thorax in the ♂; as wide as the thorax in the ♀; very slightly enlarged posteriorly; narrowed towards

the apex; testaceous, with the margins pitchy, evenly and cleanly crenate-striate; the striæ rather deep; the interstices moderately convex, smooth, with a series of extremely fine punctures not very close together on each side of every interstice. There is a pitchy-black oblong spot on the base of the fourth interstice; also a black patch occupying the disk of each elytron, and extending in a point to the shoulder; this patch is very frequently broken up into spots, forming two oblique bands. Legs pitchy-testaceous.

Hab.—Japan, Nipon and Kiushiu. Common.

Aphodius (Melinopterus) nigrotessellatus, Motsch.

“*Statura et color Mel. contaminati*, sed minor et thorace angustiore. Elongato-subovatus, convexus, nitidus, niger, elytris testaceis, tessellatim nigro-maculatis, marginis rufescentibus; capite dense punctulato, tuberculis tribus minutis carinæ-formibus; thorace transversim quadrato, punctatissimo, lateribus rufescentibus; elytris profunde punctato-striatis, interstitiis subconvexis; scutello nigro.”

Long. 2 lin.; lat. 1 lin.

Hab.—Japan.

I have not seen this species.

Aphodius atratus, sp. nov.

A. lurido affinis, at minor, minus depressus, elytrorum interstitiis crebrius punctato, &c.

Subdepressus, oblongo-ovalis, parum nitidus, niger. Caput crebre distincte punctulatum, muticum, clypeo semicirculari. Thorax sat dense punctulatus. Elytra crenato-striata. Pedes piceo-nigri; tarsis piceis.

♂. Capite lato, genis prominentibus rectangularibus. Thorace transverso, antice vix angustiori, angulis anticis rotundatis, lateribus leviter rotundatis. Elytris leviter crenato-striatis; interstitiis subplanis discrete distincte punctatis, singulis intus longitudinaliter lævissime impressis.

♀. Capite crebrius fortius punctato. Thorace antice angustato, crebre inæqualiter punctato. Elytris convexioribus, lateribus rotundatis, leviter crenato-striatis; interstitiis convexis sat crebre irregulariter punctato, sin-

gulis intus longitudinaliter impressis, inde fit ut interstitia subcariniformia appareant.

Long. $2\frac{1}{2}$ —3 lin. ; lat. $1\frac{1}{3}$ — $1\frac{2}{3}$ lin.

Hab.—Nagasaki ; Hiogo.

Aphodius rugosostriatus, sp. nov.

Obongus, convexiusculus, nitidus, piceus. Caput subtiliter discrete punctulatum ; clypeo subtilissime obsolete punctulato, semicirculari, antice leviter emarginato, genis prominulis sub-acutis ; fronte unonodosâ. Thorax transversus, subtilissime sat crebre punctulatus, postice et latera versus punctis majoribus interspersis ; angulis anticis obtusis, lateribus leviter rotundatis, angulis posticis obtusis ; basi immarginato, rotundato. Scutellum apice acuminatum, basi punctulatum. Elytra thoracis latitudinem æquantia, ab fere duplo longiora, postice paulo ampliata, fortiter crenato-striata, striis fortiter impressis latis, interstitiis angustis convexis, subcariniformibus, parce subtilissime punctulatis. Antennis luteis.

Long. $2\frac{4}{5}$ lin. ; lat. $1\frac{1}{3}$ lin.

This species appears allied to *A. depressus*, but is very unlike any species belonging to this group with which I am acquainted. The head is nearly of the same form, but is less rounded in front, with the sides oblique, and with the suture separating the clypeus slightly indicated. The thorax is less broad in proportion ; the anterior angles less rounded ; the posterior angles more obtuse ; the lateral margination less strong. The scutellum is smaller in proportion. The elytra are less emarginate at the base ; the striæ are very deep, sulciform, strongly crenate.

In some respects, especially in the sulcation of the elytra, this species resembles *Oxyomus villosus*.

Hab.—Kobé Watercourse. One specimen. 1871.

Aphodius Lewisii, sp. nov.

Elongato-oblongus, subopacus, brunneo-testaceus. Capite picco, subtiliter discrete punctulato ; oculis magnis ; clypeo rufo-testaceo, sat crebre subtiliter punctulato, in medio vix unituberculato, antice leviter sinuato ; genis paululo prominulis, obtusis. Thorace longitudine $\frac{1}{4}$ latiori, leviter convexo, crebre punctulatis (punctis parvis majoribusque intermixtis) ; angulis anticis posticisque rotundatis ; lateribus fere rectis, subparallelis ;

marginè postico leviter bisinuato haud marginato. Scutello elongato, lævi. Elytris thoracis latitudinì aequalibus, at duplo longioribus, apicem versus arcuatim attenuatis, singulis novem-costatis (costis sexto octoque abbreviatis), sulcis inter costas singulis bi-carinulatis et inter carinulis subtiliter crenato-striatis. Tibiis anticis extus tridentatis. Tarsorum posticorum articulo primo elongato, calcare $\frac{1}{3}$ longiori, articulo quatuor sequente æquante.

Long. $3\frac{1}{3}$ mill.; lat. $1\frac{1}{2}$ mill.

I have no named species with which to compare this species.

Hab.—Osaka. “Taken in September in some numbers from rotten tomatoes.”

Ammæcius nitidulus, sp. nov.

Statura *Amm. gibbi*, at niger, nitidus, elytrorum humeris rotundatis.

Niger, nitidus, convexus. Capite parce subtiliter punctulato; fronte obsolete trituberculatâ; clypeo obsolete punctulato, antice rugâ transversâ instructo, apice emarginato, angulis obtusis; genis prominulis rotundatis. Thorace transverso, antice angustato, convexo, basi marginato, crebre punctato (punctis minutis majoribusque intermixtis), angulis posticis obtusis. Scutello basi vix punctulato. Elytris basi thorace vix latioribus, postice ampliatis, convexis, nitidis, leviter crenato-striatis, interstitiis fere planis, parce subseriatim subtilissime punctulatis, lateribus minus nitidis subtilissime aciculatis, humeris obtusis. Pedibus nigro-piceis; tarsis piceis.

Long. 2 lin.

This species resembles *Amm. gibbus* in general form, The head is similar, except that the angles made by the anterior emargination are rounded; the cheeks are a little more prominent. The thorax is similar, except that the posterior angles are more obtuse. The elytra are relatively longer, and have the shoulders obtuse.

Hab.—Nagasaki. One specimen. Coll. Lewis.

Saprosites japonicus, sp. nov.

Elongatus, parallelus, niger, nitidus. Capite convexo, subtiliter crebre punctulato, antice leviter emarginato, genis prominulis subacutis, margine piceo. Thorace capite paulo latiori, sat transverso, postice paululo angus-

tato, ad basin marginato, discrete fortiter punctato latera versus crebrius punctato, angulis anticis piccis obtusiusculis, lateribus vix rotundatis, angulis posticis rotundatis. Elytris thoracis latitudine, parallelis, fortiter striatis, striis fortiter punctatis, interstitiis convexis, lævibus; humeris dente perparvo instructis. Corpore subtus nigro-piceo, nitido; mesosterni carinâ distinctâ; metasterno lævi, longitudinaliter sulcato et in medio impresso; abdomine lævi, segmentis singulis basi fortiter sulcatis et punctatis. Pedibus piccis, tibiis anticis tridentatis; tarsorum posteriorum articulo primo tibiæ calcare haud longiori.

Long. 4 mill.; lat. $1\frac{1}{2}$ mill.

To the above description I need only add that the punctures in the striæ of the elytra are separated from each other by intervals scarcely less than their diameter.

Hab.—Nagasaki. "Old trees; apparently attracted by sap. Rather scarce."

Rhysemus asperulus, sp. nov.

Oblongus, convexus, griseo-ater. Capite crebre asperato-punctato. Thorace longitudine $\frac{1}{3}$ latiori, transversim crebre ruguloso-punctato, carinis transversis quatuor. Elytris convexis, thorace haud latioribus, postice paululo ampliatis, fortiter crenato-striatis, interstitiis angustis, moniliformibus. Pedibus nigro-piceis; tarsis piccis.

Long. $3\frac{1}{4}$ mill.; lat. $1\frac{1}{2}$ mill.

Very close to *R. germanus*, but relatively shorter and broader. The thorax is less transverse, the transverse carinæ are more decidedly in pairs, and the anterior pair are further from the anterior margin. The elytra are shorter and the striæ deeper.

Hab.—Nagasaki. "In garden refuse."

Psammодиус convexus, sp. nov.

Ovatus, convexus, nitidus, castaneus. Clypeo asperato; collo fere impunctato, utrinque oblique bicarinato; genis fere rectangularibus, obtusiusculis. Thorace nigro-castaneo, longitudine fere duplo latiori, convexo, antice angustato, transversim quinque-carinato, carinis nitidis (duabus posterioribus in medio interruptis), inter carinas obsolete punctato; angulis anticis obtusis, posticis omnino rotundatis; margine postico leviter bisinuato. Scutello lævi. Elytris basi thorace paululo angustioribus, postice

ampliatis, convexis, sat fortiter crenato-striatis, interstitiis convexiusculis. Tibiis anticis obtuse tridentatis, posticis intus lævibus extus ruguloso-serratis, ad apicem dilatatis. Tarsis brevibus, articulo primo dilatato, calcare dimidio breviori.

Long. 3 mill. ; lat. (post.) $1\frac{1}{2}$ mill.

Very close to *P. sulcicollis* and of the same form, but differs in having the elytra crenate-striate, not sulcate, and the interstices are broad and nearly flat.

Hab.—Kobé; sand hills. “Two specimens in May, 1871.”

Ægialia nitida, sp. nov.

Ovata, convexa, nitida, piceo-nigra. Capite convexo, postice lævi; clypeo asperato, antice leviter emarginato; genis nullis. Thorace convexo, nitido, longitudine duplo longiori, dorsim parce subtiliter punctulato, antice angustato, angulis anticis acutiusculis, lateribus rectis, angulis posticis rotundatis. Elytris basi thorace paululo angustioribus, postice ampliatis, convexis, sat fortiter striatis, striis obsolete crenatis; interstitiis juxta suturam convexis, latera versus convexiusculis, lævibus. Pedibus piceis.

Long. 4 lin. ; lat. (post.) 2 lin.

Near *Æ. arenaria*, but rather narrower, the thorax is distinctly although very finely punctured on the disk, and there is a very slight impression in the middle of the posterior margin; the elytra are relatively longer and narrower, the striæ are deeper (obscurely crenated) and the interstices are more convex.

Hab.—N. Japan (Hakodadi). Coll. Lewis.

GEOTRUPIDÆ.

Ochodæus maculatus, sp. nov. (Pl. III. fig. 1.)

Ovatus, convexiusculus, niger, rugulosus, pubescens. Thoracis lateribus femoribusque rufo-testaceis, elytris brunneis nigro-maculatis. Caput nigrum, planum, postice angustatum, rotundatum, crebre granulolum, griseo-hirtum; collo supra excavato, excavatione nitidâ fere lævi; oculis prominentibus; clypeo antice angustato, ♀ bituberculato, ♂ lateribus reflexis; antennis piceis, clavâ nigrâ nitidâ punctatâ apice flavâ. Thorax fortiter transversus,

convexus, niger, crebre granulosus, longe flavo-hirtus, antice fortiter rotundato-emarginatus, postice bisinuatus; angulis anticis rectangularibus, lateribus angulisque posticis rotundatis. Scutellum elongatum, acuminatum, nigrum, punctatum. Elytra brevia, dorsim depressa, brunnea (maculâ humerali, fasciâ mediâ apiceque nigris), punctato-striata, interstitiis convexiusculis, subtilins crebre granulosus. Corpus subtus nigrum, nitidum, crebre punctatum. Pedes nigri, femoribus intermediis posticisque testaceis; tibiis anticis apice bidentatis; tarsis posticis longis, articulo basali tibiâ $\frac{1}{3}$ breviori.

Long. 5 lin.; lat. $2\frac{3}{4}$ lin.

This insect resembles an *Athyreus* in general appearance, but the well-developed abdomen and the structure of the antennæ and the scutellum leave no room for doubt that it should be placed in the genus *Ochodæus*; it is remarkable, however, for the great length of the basal joint of the posterior tarsus, which equals the four following joints taken together.

Hab.—"Simabara. One specimen from a dead dog, May; a second from Tagami, in a bottle set with meat."

Bolboceras nigroplagiatum.

B. farcto simillimum; differt thorace latera versus crebre fortiter punctato nitido.

Rufo-testaceum, nitidum, convexum. Capite, thoracis basi in medio, scutello, elytrorumque lateribus nigris. Thorace semicirculari, antice emarginato, postice bisinuato, nitido, dorsim parce latera versus crebre fortiter punctato, postice in medio nigro, lineâque longitudinali punctatâ, antice impresso, carinâ transversâ arcuatâ nigrâ instructo. Scutello nigro, fere lævi. Elytris lateribus parum rotundatis, nigris, plagâ magnâ triangulari rufâ, fortiter punctato-striatis, interstitiis convexis.

Long. $5\frac{3}{4}$ lin.; lat. $3\frac{1}{2}$ lin.

This species is extremely close to *B. furctum*. It differs in being slightly less convex and in having the elytra less rounded at the sides. The sides of the thorax, especially near the anterior angles, are in *B. furctum* opaque and minutely granulate, whereas in the Japanese species this part of the thorax is thickly and somewhat strongly punctured and not opaque.

The head is rugulose, with a transverse carina behind; the clypeus is furnished in front with a minute (almost

obsolete) tubercle. The elytra have each seven impressed striæ and three rows of punctures at the sides.

Hab.—Japan; Nagasaki and Corea.

✓ *Geotrupes (Phelotrupes) lævistriatus*, Motsch.

The colour of this insect is generally æneous, but it is sometimes purple-blue or blue. The depth of the striæ varies much, and the form in which they are very slightly impressed and scarcely punctured, from which the species derives its name, is less common than those in which the striæ are more deeply impressed.

The ♂ of this species is easily recognized by the single strong tooth on the under side near the base of the anterior tibia.

Hab.—Japan and Celebes.

✓ *Geotrupes (Phelotrupes) auratus*, Motsch.

Hab.—Japan and Tartary.

Geotrupes (Phelotrupes) purpurascens, sp. nov.

Latus, leviter convexus, nitidus, purpurascens, cupreo-micans. Thorace longitudine duplo latiori, convexo, pone medium ampliato, ad latera fortiter punctato, angulis anticis obtusis, lateribus fortiter rotundatis, angulis posticis obtusis. Scutello lævi. Elytris thorace vix duplo longioribus, 13-striatis, striis septem dorsalibus sat fortiter impressis, punctatis, interstitiis convexus; marginibus reflexis. Corpore subtus pedibusque viridi-aureis.

♂. Tibiis anticis extus 7-dentatis, subtus dentibus quinque armatis. Femoribus posterioribus dente forte armatis.

♀. Tibiis anticis subtus obsolete tri-nodosis. Femoribus simplicibus.

Long. 9—10 lin.; lat. 5—5 $\frac{3}{4}$ lin.

This species, which I separate very reluctantly from *G. auratus*, Motsch., differs from that insect in being of a dull purple colour, with the margins of the thorax and elytra and the striæ of the latter bright coppery. The thorax is broader than the elytra, slightly angulated behind the middle, whilst in *G. auratus* the thorax is only as broad as the elytra, and evenly rounded at the sides, and the colour is a uniform bright coppery.

Hab.—Japan (Hakodadi and Yokohama); Celebes.

Geotrupes splendidus is recorded by Motschulsky as coming from Japan, but I have never seen it from that locality.

TROGIDÆ.

Trox setifer, sp. nov.

Nigro-griseus, opacus, elongatus, convexus, antice angustatus. Clypeo transverso, rotundato, sat crebre ruguloso-punctato; fronte fortius punctatâ, postice maculis minutis quatuor piliferis ornatâ; antennis ferrugineis. Thorace sat transverso, crebre sat fortiter punctato, longitudinaliter canaliculato, utrinque obsolete bi-impreso, punctis setiferis; margine antico bisinuato, angulis anticis acutis; lateribus antice leviter rotundatis, dein subparallelis, ante angulis posticis leviter sinuatis, his fere rectis; margine postico in medio leviter lobato, hoc marginibusque lateralibus setiferis. Elytris basi thorace paululo latioribus, convexis, postice ampliatis, sat fortiter punctato-striatis, interstitiis planis, 1, 3, 5, 7 tuberculis minutis setiferis, 4, 6, 8 tuberculis majoribus ornatiss, interstitio secundo tuberculis elongatis, basi confluentibus setiferis; marginibus obscure purpureis. Tibiis anticis apice dilatatis, extus quadridentatis, dentibus basalibus minutis.

Long. $5\frac{1}{3}$ lin.; lat. (postice) 3 lin.

The suture of the elytra is slightly raised and furnished with a series of minute tufts of short fulvous bristles; the punctures in the striæ are very distinct, and are not placed very close together.

Hab.—Simabara.

Two specimens found in a dead snake in May, 1870, by Mr. Lewis.

Trox obscurus, sp. nov.

Cinereus, opacus. Capite thoraceque obscure albido-tectis, illo binoduloso, hoc supra tuberculis quinque. Elytris thoracis latitudine postice paulo ampliatis, obsolete striato-punctatis, seriebus circiter octo tuberculorum parvorum flavo-tomentosorum, serieque tuberculorum oblongorum majorum prope suturam, hic et illic maculis parvis nitidis nigris. Corpore subtus pedibusque griseo-albo tectis, abdomine nigro.

Long. 6 lin.; lat. $3\frac{1}{2}$ lin.

Head flat, acuminate in front, clothed with dirty-white tomentum; forehead with two approximate, transverse,

brown tubercles. Thorax convex, clothed with dirty-white tomentum, thickly punctured, broadly lobed over the head, anterior angles obtuse, the sides slightly rounded in front and then gently emarginate before a lateral projection, which has its apex rounded; the posterior angles obsolete; the posterior margin gently flexuous, with a projecting lobe over the scutellum. The thorax above is furnished with a triangular raised portion (divided in the middle by a furrow), the base of which forms the anterior margin of the thorax, and the apex is directed backwards; on each side it is emarginate in the middle. There is, moreover, on each side, at the posterior angle, a kidney-shaped tubercle, and two others placed on the hind margin, one on each side, near the scutellum. The scutellum is trefoil-shaped. The elytra are ashy-grey, about $2\frac{3}{4}$ times as long as the thorax, rather broader posteriorly, with the sides straight in the middle; they are obscurely punctured in lines, with about eight rows of small, oblong, only slightly-raised tubercles; the tubercles in the second row are distinctly larger and are black at the base. Here and there on the elytra are shining black spots.

Hab.—Hong Kong; Japan.

Trox opacotuberculatus, Motsch.

“Figura *Tr. scabri*, L., sed elytris utrinque tuberculis magnis, oblongis, opacis, quadruplici serie; ater, opacus, thorace transverso, antice et postice lato, trifoveolato; elytris thorace paulo latioribus, tuberculis oblongis, brevissime fusco-puberulis, utrinque quadruplici serie; postice tuberculis quinque approximatis, transversim dispositis, utrinque elevatis, interstitiis planiusculis, tuberculis minutissimis laxè adpersis.”

Long. $2\frac{1}{2}$ lin.; lat. (elytr. post.) $1\frac{1}{3}$ lin.

Hab.—Japan; Hakodadi; Nagasaki.

MELOLONTHIDÆ.

✓ *Ectinohoplia variolosa*, sp. nov. (Pl. III. fig. 2.)

Capite nigro; clypeo piceo, angulis rotundatis, margine vix reflexo. Thorace capite fere duplo latiori, transverso, leviter convexo, antice leviter bisinuato, postice rotundato, angulis anticis fere acutis, lateribus angulisque posticis rotundatis. Scutello elongato triangulari, apice acuto. Elytris thorace paulo latioribus et duplo longioribus, planis, subquadrangularibus, humeris obtusis, lateribus

fere rectis, deflexis, singulis ad apicem rotundatis. Antennis pedibusque rufo-testaceis, perlongis, parce argenteo-squamulatis.

Capite sat dense viridi-argenteo-squamulato; thorace dense viridi-squamulato, lineis longitudinalibus quatuor nigris, duabus lateralibus obliquis. Scutello elytrisque viridi-squamulatis, nigro-lineatis. Corpore subtus squamis viridi-albis dense tecto, nigro punctato.

Var. Capite, thorace, elytrisque totis nigro-squamatis.

Long. $3\frac{1}{2}$ lin.; lat. 2 lin.

Hab.—Nagasaki (abundant in May); frequents especially the dog-rose.

✓ *Hoplia communis*, sp. nov.

♂. Nigro-picea, supra dense squamulis obscure aureo-
viridibus tecta, subtus squamis viridibus et cupreis crebre
aspersis. Capite, clypeo transverso, piceo, antice leviter
emarginato, angulis rotundatis, marginibus reflexis.
Thorace leviter convexo, antice et postice paulo angustato,
margine postico arcuato utrinque leviter sinuato, angulis
posticis obtusis, fere rotundatis. Scutello parvo. Elytris
basi thoracis latitudinem æquantibus, postice ampliatis,
singulis ad apicem rotundatis. Pedibus longis.

Long. $3\frac{1}{2}$ —4 lin.; lat. $1\frac{1}{3}$ —2 lin.

♀. Corpore convexiori, pedibus brevioribus.

Var. Supra flavo-squamosa; pedibus antennisque piceis.

This species is allied to *H. farinosa*, Linn. The thorax is relatively shorter, more narrowed posteriorly where it is narrower than the base of the elytra; the posterior margin is somewhat lobed in the middle.

Hab.—Nagasaki; Yokohama.

ι *Hoplia mærens*, sp. nov.

Fusco-nigra; scutello corporeque subtus dense squamis
argentiaceis tectis. Capite, clypeo transverso, antice recte
truncato, angulis obtusis, marginibus reflexis, lateribus
parallelis. Thorace capite duplo latiori, longitudine $\frac{1}{3}$
latiori, leviter convexo, crebre subtiliter asperato-punctu-
lato et brevissime griseo-pubescenti, antice leviter emargi-
nato, angulis anticis vix obtusis, lateribus antice leviter
rotundatis, angulis posticis obtusiusculis, margine postico
arcuato. Scutello parvo, squamis argenteis tecto. Elytris
thorace paulo latioribus, sat convexis, dorsim depressis,
crebre subtiliter asperato-punctulatis et brevissime griseo-

pilosis, lateribus leviter rotundatis, singulis ad apicem rotundatis. Pedibus longis, parce setis argenteo-viridibus ornatis; unguibus piceis.

Long. $3\frac{1}{4}$ lin.; lat. $1\frac{1}{2}$ lin.

Hab.—Hiogo, Nagasaki, &c.

✓ *Serica boops*, sp. nov. (Pl. III. fig. 3.)

Oblongo-ovata, brunneo-testacea, subopaca. Capite piceo-nigro; fronte discrete punctulatâ; clypeo ut in *Sericâ brunneâ* at angulis minus rotundatis, et antennis longioribus, oculis majoribus. Thorace transverso, leviter convexo, longitudine $\frac{1}{3}$ latiori, antice capite (oculis inclusis) vix angustiori, postice paulo latiori, margine antico utrinque sinuato, angulis anticis acutis, lateribus vix rotundatis, angulis posticis rectis, disco fusco. Scutello elongato-triangulari, crebre punctato. Elytris basi thoracis latitudinem æquantibus at $3\frac{1}{2}$ longioribus, postice paulo ampliatis, leviter convexis, obscure testaceis, distincte striatis, striis crebre irregulariter punctatis, interstitiis convexiusculis, irregulariter nigro-guttatis, parce punctatis, punctis nonnullis brevissime setiferis.

Long. $3\frac{3}{4}$ lin.; lat. 2 lin.

Allied to *S. brunnea*, but (besides the colouration) distinguished by the larger and more prominent eyes, by the slightly more transverse thorax, which is more sinuated in front, by the scutellum being very distinctly punctured and having the apex less acute, and by the striæ of the clytra being composed of a single irregular line of punctures.

Hab.—End of June, on Maiyasan, Hiogo; flying at dusk.

Serica brunnea, Linn.

Hab.—Various parts of Japan.

Serica grisea, Motsch.

Serica? grisea, Motsch. Bull. Mosc. 1866, i. p. 171.

Statura *Ser. brunneæ*, sed brevior. Elongata, parallela, subconvexa, nigra, dense griseo-pubescentis, antennarum basi, tibiis tarsisque brunneis; fronte antice transversim impressâ, antennarum clavâ longiusculâ, 3-articulatâ; thorace transverso, punctulato; clytris thorace paulo latioribus, quadrangulatis, striatis, interstitiis subconvexis, punctatis; tibiis anticis bidentatis.

Long. 3 lin.; lat. $1\frac{3}{4}$ lin.

Hab.—Japan.

Serica polita, Gebler.

S. polita, Gebler, Nouv. Mém. Mosc. ii. p. 52.

This is an extremely variable insect. The ordinary colouration brownish-testaceous, with a slight æneous reflection, but sometimes the head and thorax are bluish-æneous, and rarely the whole insect is greyish-æneous. It is this last variety which I have determined to be *S. polita* of Gebler. In Mr. Lewis' collection there is a specimen, in bad condition, of an insect which agrees very well with Motschulsky's description of *S. grisea*, and it appears to me to be very probable that this is only a variety of *S. polita*. I see only colour-differences, but do not like to unite the two upon such slight evidence.

Hab.—Japan; Dauria.

Serica japonica, Motsch.

S. japonica, Motsch. Etud. Ent. 1860, p. 15.

“Ovata, convexa, sparsim punctata, velutina, rufo-castanea, oculis nigris, nitidis; clypeo truncato, reflexo, confertim fortiter punctato; thorace transverso, antice arcuatim angustato, sparsim punctato, angulis anticis prominulis, posticis rectis; clytris thorace paulo latioribus, ovatis, striatis, interstitiis subconvexis, sparsim punctatis; corpore subtus punctato, opaco.

“Long. 3 lin.; lat. clytr. $2\frac{1}{2}$ lin.”

In this (as was evidently Motschulsky's frequent custom) the author took the measurements from an inch divided into eighths instead of twelfths. The size should be $4\frac{1}{2}$ lin., $3\frac{1}{4}$ lin.

Hab.—Japan, in all the islands; Hong Kong.

Serica orientalis, Motsch.

S. orientalis, Motsch. Etud. Ent. 1857, p. 33.

Hab.—Japan; Mongolia. Common.

Apogonia splendida, Bohem.

Ap. splendida, Bohem. Res. Eugenes, p. 55.

Breviter ovata, convexa, nitida. Capite cupreo, parce, clypeo profunde punctato. Thorace cupreo, parce punctu-

lato. Scutello lævi. Elytris cupreo-æneis, sat crebre fortius punctatis.

Long. 9, lat. 5 mill.

Var. Elytris castaneis.

Hab.—Japan; Hong Hong, &c.

Apogonia major, sp. nov.

Oblonga, convexa, nitida, cuprascens. Capite lato, modice convexo, cupreo-nigro, crebre fortiter punctato; clypeo fortius punctato antice emarginato, angulis late rotundatis. Thorace longitudine fere duplo latiori, sat crebre fortiter punctato, disco antice leviter bi-impresso, angulis anticis supra impressis prominulis, lateribus leviter rotundatis, angulis posticis obtusis (fere rotundatis). Scutello triangulari, lævi. Elytris basi thorace vix latioribus, at quadruplo longioribus, postice perpaulo ampliatis, ad apicem obtusis, sat crebre fortiter punctatis, bicostatis; costis parum elevatis, parce punctulatis, costâ interiori latiori. Tarsis piceo-nigris. Antennis palpisque piceis.

Long. 5—6 lin.; lat. 3—3½ lin.

Hab.—Nagasaki.

Holotrichia parallela, Motsch.

“Nigro-picea, subopaca, grosso-parcius-punctata; thoracis lateribus areuatis, angulis posticis rectis, elytris tricostis.

“Long. 8 lin.; lat. 4 lin.”

Hab.—Shanghai; Formosa; Japan.

Holotrichia picea, sp. nov.

Nigro-picea, subparallela, convexiuscula. Capite lato, sat fortiter rugoso-punctato, clypeo leviter emarginato, vertice postice fere carinato, post carinam subito lævi. Thorace longitudine duplo latiori, discrete latera versus sat crebre punctato, antice angustato, postice vix angustato, margine antico leviter emarginato, angulis anticis obtusis, posticis rectis. Scutello discrete punctulato. Elytris thoracis latitudine, postice paulo ampliatis, convexiusculis, sat crebre fortiter punctatis; suturâ lineisque quatuor elevatis, quarum unâ suturali postice latâ; capitâ thoracisque marginibus longe parce pilosis.

Long. 9 lin.; lat. 4½ lin.

Var. Rufo-picea.

This and the preceding species are closely allied. The

insect which I suppose to be *H. parallela* of Motsch., from the above diagnosis (given in the Étud. Ent. 1854, p. 64), differs from *H. picea* in having the head less thickly and less rugosely punctured; the neck is finely punctured and is not separated from the forehead by any distinct line; the thorax is the same form, but is rather less thickly and more strongly punctured; the margins are very slightly crenulate and have only short hairs; lastly, the raised stria next the suture, which in both becomes very dilated posteriorly, never unites with the suture, whereas in *H. picea* it approaches and nearly joins the suture some distance before the apex. In both species the tarsi are longer in the males.

Hab.—Nagasaki; Hakodadi.

Holotrichia morosa, sp. nov.

H. piceæ persimilis, at fere nigra, tota pruinosa, convexior.

Long. 10 lin.

This insect only differs from *H. picea* in being more convex, nearly black, and opaque through the pruinose surface. The club of the antennæ is very small, not longer than the four preceding joints taken together, whereas in *H. picea* the club is nearly as long as the six preceding joints.

I at first believed this to be the ♀ of *H. picea*, but from dissection this is evidently not the case.

Hab.—Nagasaki; Chee-foo.

Holotrichia castanea, sp. nov.

H. sinensi affinis. Oblonga, castanea, elytris nitidis. Capite lato, confertim punctato, clypeo leviter emarginato, fronte transversim carinatâ. Thorace convexo, antice paulo angustato, longitudine $\frac{1}{3}$ latiori, margine antico vix emarginato, angulis anticis obtusiusculis, lateribus arcuatis, angulis posticis obtusis, fere rotundatis, superne confertim subtiliter punctato. Scutello confertim punctato. Elytris thoracis latitudine postice paulo ampliatis, ad apicem rotundatis, crebre fortiter punctatis, suturâ late paulo elevatâ.

Long. $9\frac{1}{2}$ lin.; lat. 5 lin.

Closely allied to *H. sinensis*, Hope, but that species has the thorax and base of the elytra blackish. The sides

of the thorax are not angulated as they are in *H. sinensis*, and the punctuation is somewhat finer; the front margin is very much less emarginate, and consequently the angles are not prominent. The punctuation of the elytra is equal all over, somewhat stronger than in *H. sinensis*. Both species have a smooth line near the lateral margin, but have no raised lines on the disk.

Hab.—Kawachi.

Holotrichia transversa, Motsch.

H. transversa, Motsch. Etud. Ent. 1860, p. 15.

“Tantum *Hol. serricollis*, Mots. E. E. 1853, 46 (Ancyl.), sed fronte convexiore, nitidior, lævior, sparsim grosso-punctato, carinula transversa, postice nulla, clypeo inter antennis transversim impresso; thorace valde transverso, sparsim grosso-punctato, lateribus arcuatis, medio dilatatis, antice crenatis; clytris basi thorace paulo angustioribus, postice dilatatis, sparsim punctatis, sutura subelevata, utrinque nervis duobus obliquis vix distinctis, abdomine subinflato pygidioque sparsim punctato, corpore subtus vix piloso.”

“Long. $4\frac{1}{2}$ lin.; lat. elytr. post. $2\frac{1}{2}$ lin.”

Hab.—Japan.

POLLAPLONYX, gen. nov.

Corpus elongatum. Labrum fortiter triangulariter excisum. Palpi maxillari prælongi; articulo secundo elongato; tertio brevi; apicali in ♂ securiformi, in ♀ præcedenti triplo longiori, subinflato, apice subtruncato. Antennæ articulo primo elongato, secundo dimidio brevi, 3, 4 et 5 paulo longioribus sub-æqualibus, 4 et 5 fere conjunctis, 6 et 7 transversis, clavâ triarticulatâ elongatâ (♂) vel ovali (♀). Tibiis anticis maris vix bidentatis, foeminae apice bidentatis. Unguibus basi dentatis, apice fissis.

This genus is allied to *Atys*.

Pollaplonyx flavidus, sp. nov. (Pl. III. fig. 6.)

♂. Elongatus, depressus, flavus, nitidus. Fronte obsolete tri-impressâ discrete fortiter punctatâ, clypeo fere semi-circulari, discrete fortiter punctato, antice acute inciso. Thorace transverso, discrete fortiter punctato, longitudine $\frac{2}{3}$ latiori, antice vix sinuato, angulis anticis obtusis, late-

ribus rotundatis (medio vix angulatis), angulis posticis obtusis, margine postico fere truncato. Scutello lævi. Elytris basi thorace paulo angustioribus et triplo longioribus, postice ampliatis, leviter convexis, sat crebre fortiter punctatis, singulis nervis quatuor, duobus exterioribus angustis. Pedibus longis; tibiis anterioribus angustis, extus bidentatis; unguibus basi dentatis, apice fissis.

Heptophylla picea, Motsch.

H. picea, Motsch. Etud. Ent. 1857, p. 32.

Hab.—Nagasaki; Yokohama.

Granida albolineata, Motsch. (Pl. III. fig. 7.)

G. albolineata, Motsch. Etud. Ent. 1861, p. 8.

Hab.—Nagasaki (rare); Nipon (not uncommon).

Hoplosternus japonicus, Harold.

H. japonicus, Harold, Abhandl. Nat. Ver. Bremen, iv. 1874, p. 291.

“Elongatus, sat convexus, fusco-rufus, elytris dilutius rufis, dense, elytris longius flavo-pilosis; capite thoraceque densissime punctulatis, elytris præterea punctis majoribus parum profundis.

“Long. 26—29 mill.”

Allied to *H. chinensis*.

Hab.—Osaka (in the month of May).

Melolontha japonica, Burm.

M. japonica, Burm. Handb. iv. p. 420.

Hab.—Yokohama; Hiogo; Nagasaki (in May).

RUTELIDÆ.

Phyllopertha horticola, Linn.

Hab.—Chowsan; Manchuria; Hakodadi.

Phyllopertha diversa, sp. nov. (Pl. III. fig. 5.)

♂. Oblonga, depressa, nigra. Capite ruguloso-punctato, margine antico reflexo, angulis rotundatis. Thorace (antice capite vix latiori) leviter convexo, sat crebre for-

titer punctato, longitudine duplo latiori, lateribus post medium leviter sinuatis; angulis anticis obtusiusculis, posticis fere rectis; basi marginato, dorso antice leviter canaliculato. Scutello semicirculari, fortiter punctato. Elytris thorace paulo latioribus, parallelis, singulis ad apicem rotundatis testaceis, suturâ marginibusque piceis, superne subtiliter striato-punctatis, ad apicem lævibus. Antennis piceo-testaceis, articulis 3, 4, 5 subæqualibus, clavâ elongatâ. Tibiis anticis extus bidentatis; tarsis longis, præsertim posticis.

Long. $3\frac{3}{4}$ lin.; lat. $1\frac{4}{5}$ lin.

Var. Elytris marginibus late piceis.

The following I have no doubt is the ♀ of this species, although the form is very different.

♀. Statura *Ph. horticola*, at brevior. Thorace canaliculâ impressâ utrinque foveolato. Elytris subtiliter striato-punctatis, interstitio suturali irregulariter punctulato.

Long. 4 lin.; lat. $2\frac{1}{3}$ lin.

Variat; thorace nigro, vel testaceo maculis quatuor nigris. Elytris testaceis vel piceis.

Hab.—Nagasaki, in May.

✓ *Phyllopertha irregularis*, sp. nov. (Pl. III. fig. 4.)

Ph. horticola affinis. Viridis (vel cuprea), breviter griseo-hirta. Capite thoraceque saturâ *Ph. horticola*, at hoc punctulato ut in *horticola* ♀. Scutello breviori, semicirculari, crebre punctato. Elytris paulo longioribus, parum convexis, testaceis, suturâ marginibusque æneis. Antennis piceis, clavâ prælongâ, nigrâ. ♂.

Long. $4\frac{1}{2}$ lin.; lat. $2\frac{1}{4}$ lin.

Fœm.—Antennarum clavâ breviori, corpore crassiori, thorace crebre fortius punctato.

Var. Testacea; fronte, thoracis disco, scutelli lateribus viridibus.

From the above description it will be seen that this species differs from *Ph. horticola* besides the colouration in having the club of the antennæ much longer, the punctuation of the thorax is closer, and the elytra longer. Having only seen two specimens of this species I am not able to say what is the usual sculpture of the elytra. In the male above described they are not striated but are slightly rugulose, but in the female they are somewhat delicately punctured, the punctures forming lines near the suture. The club of the antennæ in the ♀ is as long as

that in the ♂ of *Ph. horticola*. The clypeus, the sides of the thorax and the legs in the ♀ are obscure testaceous, but this is probably not always the case.

Hab.—Nagasaki (♂), in May; Kawachi (♀).

✓ *Phyllopertha orientalis*, sp. nov.

Ph. campestri affinis. Obscure cupreo-ænea, elytris plerumque flavo-variegatis. Capite fere ut in *Ph. horticola*, fronte crebre punctulatâ, clypeo angulis rotundatis. Antennarum clavâ prælongâ nigrâ. Thorace parum convexo, antice angustato, sat crebre fortiter punctato, lateribus arcuatis, angulis posticis obtusiusculis, basi fere rotundato, marginato. Scutello arcuatim triangulari, punctulato. Elytris thoracis basi latitudinem æquantibus postice paulo ampliatis, ad apicem obtusis, depressiusculis, fortiter striatis, striis fortiter irregulariter punctatis, interstitiis convexis, subtiliter obsolete punctulatis.

Long. 4—5½ lin.; lat. 2½—3¼ lin.

Var. a. Testacea, fronte thoracisque maculis duabus æneis; tarsis piccis.

Var. b. Testacea, fronte thoracis limbo, elytrorumque fasciis duabus irregularibus æneis.

Var. c. Ænea, elytris nigro-piccis, flavo-maculatis.

Besides the colouration this species varies much in form, the smaller specimens being more convex and slightly ovate; the sculpture of the elytra also varies, the interstices being almost rugulose in some specimens, whereas they are almost smooth in others.

Hab.—Kawachi; Nagasaki; Hakodadi. (Common in May and June.)

Phyllopertha arenaria, Brullé.

Hab.—Nagasaki, in May.

Phyllopertha octocostata, Burm.

Ph. octocostata, Burm. Handb. iv. 1, p. 243.

Hab.—Japan. "A common species; it appears with the first warm days of spring."

This is placed as a synonym of *Anomala costata*, Hope, under *Phyllopertha* in Gemminger's Catalogue; *costata* is quite a different insect, and will be referred to under *Anomala*, closely allied to *A. aurata*.

✓ *Anomala rufocuprea*, Motsch.*A. rufocuprea*, Motsch. Etud. Ent. 1860, p. 14.*R. lucidulus*, Motsch. Bull. Mosc. 1866, i. p. 171.

This species is very common, and is one of the most variable in appearance with which I am acquainted. It is closely allied to *A. Frischii*. It varies in colour from testaceous through cupreous-æneous, blue to nearly black.

Hab.—Japan; Tartary. “Abundant on sallows.”

Rhombonyx lucidulus, Motsch. In the British Museum collection there is a specimen from Hokodadi which agrees perfectly with the description of this species. I consider it to be merely a variety of *A. rufocuprea* with testaceous elytra.

Anomala oblonga, Fabr. Motschulsky records this species from Japan. Has he not mistaken one of the varieties of *A. rufocuprea* for it? This latter has, however, the thorax constantly delicately punctured.

Anomala geniculata, Motsch.*Rhinoplia geniculata*, Motsch. Bull. Mosc. 1866, i. p. 171.

“Statura et color *Anom. Frischii*, sed latior. Ovata, convexa, nitida, punctulata, supra pallide testacea; capite, thorace scutelloque plus minusve æneis, corpore subtus nigro-cupreo, pedibus nigro-æneis, geniculis testaceis; elytris dense punctato-striatis, interstitiis alternis paulo latioribus.”

Long. 6 lin.; lat. $3\frac{1}{2}$ lin.

Hab.—Japan.

If I have correctly determined this species, it is a broader and less convex species than *A. rufocuprea*, and has the thorax less densely punctured. I have seen specimens in which the elytra are æneous; but the margins are generally testaceous.

Length 6 to 8 lines.

Anomala costata, Hope.✓ *A. costata*, Hope, Proc. Zool. Soc. 1839, p. 73.

Hab.—Japan.

It is closely allied to *A. aurata*, Fabr., but has the channel on the thorax much stronger, and the costæ on the elytra more distinct, &c.

Anomala testaceipes, Motsch.

Rhombonyx testaceipes, Motsch. Etud. Ent. 1860, p. 14.

“Oblongus, postice paulo dilatatus, punctatus, nitidus, supra viridi-aneus, subtus testaceus, nigro-viridi-variegatus; ore, antennis, thoracis lateribus angustissime, pygidio, ano pedibusque testaceis, tibiis tarsisque viridi-maculatis; capite crebre punctato; thorace valde transverso, nitido, sparsim punctulato, inæquali, medio longitudinaliter impresso, lateribus arcuatis, medio dilatatis antice angustatis, angulis anticis prominulis, posticis rectis; scutello transverso, arcuato, sparsim punctulato; clytris thorace paulo latioribus, postice dilatatis, apice subtruncatis, utrinque costis quatuor suturaque elevatis, costis obtusis, nitidis, interstitiis subrugoso-punctatis, paulo opacis; pygidio abdominisque punctatis.”

Long. $6\frac{1}{2}$ lin.; lat. $3\frac{2}{3}$ lin.

I am in considerable doubt with regard to this species. There is, however, a specimen of an insect ($6\frac{1}{2}$ lin.) which agrees so nearly with the description that I have considered it the present species. There is also a common insect which I take to be merely a variety of *A. testaceipes*, which has the thorax rather less thickly punctured; the costæ of the elytra strongly marked, with the intervals semi-opaque, and very finely granulose. This is closely allied to *A. costata*, but is rather smaller (7 lin.), and is easily distinguished by the rugulose intervals of the elytra.

Hab.—Hakodadi; Nagasaki, &c., in July.

The following is also closely allied:—

Anomala flavilabris, sp. nov.

A. testaceipedi affinis, minus convexa, clypeo testacco, thorace discrete punctulato, lateribus arcuatis in medio nec dilatatis, postice marginato; clytris obsolete costatis, interstitiis nitidis, punctatis et rugulosis.

Long. 7—8 lin.; lat. $3\frac{1}{4}$ —4 lin.

This is at once separated from *A. testaceipes* (with the description of which it agrees perfectly except in the above particulars) by the sides of the thorax being not angulate in the middle, and by the base being margined, which is only the case towards the sides in *A. costata* and *testaceipes*.

Hab.—Japan.

Anomala difficilis, sp. nov.

Elongata, convexa, nitida, supra testacea viridi tineta, fronte thoracisque disco viridi-æneis, pectore abdomineque nigro-æneis. Clypeo margine reflexo, subtilissime ruguloso, fronte discrete punctulatâ, oculis magnis. Thorace discrete subtiliter punctulato, antice capitis latitudine, postice paulo latiori; lateribus arcuatis medio paululo angulatis; angulis anticis prominulis, posticis rectis; basi marginato. Scutello parce subtiliter punctulato. Elytris thorace vix latioribus et triplo longioribus, postice paulo ampliatis, striatis, striis irregulariter impressis et punctulatis, interstitio juxta suturam parce punctato. Pedibus longis. Antennarum clavâ elongatâ.

Long. 6 lin.; lat. 3 lin.

Hab.—Japan.

Anomala pubicollis, sp. nov.

Breviter ovalis, convexa, cuprea, elytris testaceis, capite thorace corporeque subtus longe griseo-flavo pilosis. Capite: clypeo transverso, crebre subtiliter ruguloso, fronte minus crebre fortius punctulatâ. Thorace longitudine $\frac{1}{2}$ longiori, convexo, transversim sat fortiter punctato, antice angustato, angulis anticis obtusiusculis, lateribus arcuatis in medio paululo angulatis, angulis posticis fere rectis, basi ad scutellum leviter lobato. Scutello basi punctato. Elytris thorace vix latioribus et duplo longioribus, postice paulo ampliatis, ad apicem obtusis, convexiusculis, testaceis, obsolete subtiliter striato-punctatis, interstitio suturali obsolete punctato. Antennarum clavâ prælongâ.

Long. $4\frac{1}{2}$ lin.; lat. $2\frac{2}{3}$ lin.

Fœm.—Antennarum clavâ elongato-ovatâ; fronte crebre punctatâ; thorace crebre fortiter punctato.

Long. 5 lin.; lat. 3 lin.

Hab.—Nagasaki and Hiogo.

✓ *Euchlora cuprea*, Hope.

E. cuprea, Hope, Proc. Zool. Soc. 1839, p. 72.

Hab.—Japan. "Appears in June, a fortnight later than *E. albopilosa*; both species do immense injury to foliage, and occur in the same localities in all the islands."

Euchlora albopilosa, Hope.*E. albopilosa*, Hope, Proc. Zool. Soc. 1839, p. 70.*Hab.*—Japan.✓ *Euchlora multistriata*, Motsch.*Heteroplia multistriata*, Motsch. Etud. Ent. 1861, p. 7.*Hab.*—Japan; with the preceding, but not so common; Tsusima.✓ *Mimela Gaschkevitchii*, Motsch.*M. Gaschkevitchii*, Motsch. Etud. Ent. 1857, p. 32.*Hab.*—Japan; in all the islands; the red variety not so common. Hakodadi (black variety).✓ *Mimela lucidula*, Hope.*M. lucidula*, Hope, Trans. Ent. Soc. i. 1835, p. 113.*Hab.*—Japan (sec. Hope).[*Mimela testaceoviridis*, Blanch.]*M. testaceoviridis*, Bl. Cat. d.l. Coll. Ent. Mus. d. Paris, p. 197.*Hab.*—China, Japan (sec. Jekel).✓ *Popilia japonica*, Newm.*P. japonica*, Newm. Trans. Ent. Soc. iii. 1841, p. 43.*Hab.*—Japan. Very common in all the islands. Kawachi, var. without æneous margin to clytra.*Popilia bisignata*, Sturm., MS., given in Gemminger's Catalogue as a synonym of *P. cupricollis*, is probably this variety.✓ *Adoretus tenuimaculatus*, sp. nov.

Elongatus, leviter convexus, subnitidus, brunneus, dense breviter griseo-squamoso-pubescentis. Capite magno, fronte crebre sat fortiter punctatâ, clypeo semicirculari, subtilius punctato, margine reflexo. Thorace capite paulo latiori, leviter convexo, crebre fortiter (latera versus confluenta) punctato, transverso, longitudine duplo latiori, antice paululo angustiori, angulis anticis prominulis vix obtusis, lateribus leviter arcuatis, angulis posticis obtusiusculis.

Elytris basi thoracis latitudine, medio paulo ampliatis, ad apicem obtusis, crebre fortiter punctatis, singulis costis tribus parum elevatis, secundâ serie maculorum parvorum albidorum ornatâ, ad apicem maculâ albidâ majore.

Long. $4\frac{1}{2}$ lin.; lat. $2\frac{1}{2}$ lin.

Hab.—Japan. Very common in all the islands.

DYNASTIDÆ.

Xylotrupes dichotomus, Linn.

Hab.—Phil. Is., China, Japan, Darjeeling.

Phileurus chinensis, Falderm.

Ph. chinensis, Fald. Mém. Ac. Petr. ii. 1835, p. 370.

Hab.—China; Japan.

CETONIIDÆ.

Rhomborrhina japonica, Hope.

R. japonica, Hope, Trans. Ent. Soc. iii. 1841, p. 64.

Hab.—Japan. Very common in all the islands.

Rhomborrhina unicolor, Motsch.

R. unicolor, Motsch., Etud. Ent. 1861, p. 8.

Hab.—Japan. Less common than the preceding, but associated with it.

Rhomborrhina polita, sp. nov.

Nigra, nitida. Capite angusto. Thorace antice angustato, lateribus discrete punctato. Scutello fere lævi. Elytris elongatis, apicem versus angustatis, subtilius discrete punctulatis. Tibiis posticis intus longe fulvo-hirtis.

Long. $13\frac{1}{2}$ lin.

Allied to *R. japonica*, but much narrower. From *R. nigra* it is distinguished by its more elongate form, and less close punctuation. It most nearly resembles

R. unicolor, but is much less closely punctured both on the thorax and elytra, the disk of the former being almost smooth as is also the scutellum; in *R. unicolor* the posterior tibiæ have scarcely any hair on the inner edge, whereas in the present insect there is a fringe of long fulvous hair in both sexes.

Hab.—Yokohama.

Glycyphana pilifera, Motsch.

G. pilifera, Motsch., *Etud. Ent.* 1860, p. 15.

Hab.—Japan, N. and S.

Glycyphana argyrosticta, Burm.

G. argyrosticta, Burm. *Handb.* iii. p. 360.

G. albosetosa, Motsch. *Etud. Ent.* 1861, p. 9.

Hab.—Japan, N. and S.

A black variety of this species occurs, but apparently only in the north.

Glycyphana Sieboldi, Snellen v. Voll.

G. Sieboldi, S. v. Voll., *Tijdsch. Ent. Nederl.* vii. 1864, p. 158.

Hab.—Japan.

Glycyphana fulvistemma, Motsch.

G. fulvistemma, Motsch. Schrenck, *Reis.* 1860, p. 135.

Hab.—Mongolia; Japan.

Cetonia submarmorea, Burm.

C. submarmorea, Burm. *Handb.* iii. p. 460.

Hab.—Japan.

Cetonia speculifera, Swartz.

C. speculiferu, Swartz, *Schönh. Syn. Ins.* i. 3.

Hab.—China and Japan.

Anthrachophora rusticola, Burm.

A. rusticola, Burm. *Handb.* iii. p. 624.

Hab.—Japan.

Gnorimus subopacus, Motsch.

G. subopacus, Motsch., Schrenck, Reis. 1860, p. 134, t. 9, f. 5.

Hab.—Chowsan; Tsu-sima.

Trichius fasciatus, Linn.

Hab.—Yesso.

Trichius septemdecimguttatus, Snellen v. Voll.

(Pl. III. fig. 8.)

T. 17-guttatus, Snellen v. Voll., Tijdsch. Ent. Nederl. 1864, p. 159.

Niger, opacus; thorace elytrisque albo-maculatis.

Long. $5\frac{1}{2}$ lin.; lat. 3 lin.

Var. Thorace elytrisque rubris, pedibus quatuor anticis piceis.

♂. Capite elongato, subtilissime granuloso. Thorace sat convexo, obsolete punctulato, longitudine $\frac{1}{3}$ latiori, antice angustato, lateribus vix arcuatis, angulis posticis vix perspicuis; basi rotundato, marginato; superne maculis quinque parvis. Elytris convexiusculis, thorace paulo latioribus, medio rotundato-ampliatis, latitudine paulo longioribus, basi striatis, singulis maculis parvis albis, unâ juxta scutellum, alteris :: positis. Pygidio utrinque maculâ magnâ albâ. Antennarum clavâ prælongâ. Pedibus longis.

♀. Clypeo paulo breviori; thorace crebre fortiter punctato. Elytris paulo latioribus. Antennarum clavâ elongatâ.

Hab.—Japan. "Four specimens only from Tomatru, near Nagasaki, in May. Sought during six years."

The red colouration is not a sexual character; and one of Mr. Lewis' specimens has the thorax red, with the anterior margin black.

Valgus angusticollis, sp. nov.

Statura *V. hemipteri*, thorace angustiori, clytris paulo longioribus.

Long. $2\frac{3}{4}$ lin.; lat. $1\frac{1}{2}$ lin.

Closely allied to *V. hemipterus* and very similar in appearance. Thorax as in that species but relatively nar-

rower, more narrowed in front, the sides nearly parallel behind the middle. Elytra a trifle longer than broad, with the sides parallel, striated as in *hemipterus*, with the interstices longitudinally scratched; on the second interstice, near the scutellum, there is commonly a spot formed of black scales, and another near the apex of the third interstice, with a white spot at the apex, but sometimes the black scales form a band at the base and another near the apex of the elytra, the space between the bands being sparsely clothed with whitish scales.

Penultimate segment of the abdomen with a white spot on each side above, the pygidium rarely with white scales. Tarsi in both sexes relatively longer than in *V. hemipterus*, the second joint being half the length of the basal joint.

Hab.—Japan. All the islands, including Tsu-sima; common.

DESCRIPTION OF PLATE III.

- Fig. 1. *Ochodæus maculatus*, C. Waterh.
 2. *Ectinohoplia variolosa*, C. W.
 3. *Serica boops*, C. W.
 4. *Phyllopertha irregularis*, ♂, C. W.
 5. „ *diversa*, ♂, C. W.
 6. *Pollaplonyx flavidus*, C. W.
 7. *Granida albolineata*, Motsch.
 8. *Trichius 17-guttatus*, Snellen v. Voll.